

Appln No. 10/589,220  
Amdt date July 15, 2011  
Reply to Office action of April 15, 2011

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Original) A compound of the formula:



wherein

each R is a group comprising at least one carbon, nitrogen, phosphorus or sulfur atom and  
G is joined to R through said carbon, nitrogen, phosphorus or sulfur atom;

G is silicon or boron;

m is 2 to 5 and n is 1 to 3 with  $m + n = 3$  to 6 when G is silicon;

m is 1 to 3 and n is 1 to 3 with  $m + n = 3$  to 4 when G is boron;

and wherein the compound further comprises one or more counterions when the above formula is  
charged; and wherein at least one F is  $^{18}\text{F}$ .

2. (Original) The compound of claim 1 wherein one or more counterions are present  
when  $m + n = 5$  or 6 and G is Si and when  $m + n = 4$  and G is B;

3. (Previously Presented) The compound of claim 1 wherein G is silicon.

4. (Original) The compound of claim 3 wherein at least two of F are  $^{18}\text{F}$ .

5. (Previously Presented) The compound of claim 3 wherein:

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- (i)  $m = 2, n = 3$ ;
  - (ii)  $m = 4, n = 1$ ;
  - (iii)  $m = 5, n = 1$ ;
  - (iv)  $m = 2, n = 2$ ;
  - (v)  $m = 3, n = 1$ ; or
  - (vi)  $m = 3, n = 2$ .
6. (Original) The compound of claim 5 wherein:
- (i)  $m = 2$  and  $n = 3$ ;
  - (ii)  $m = 4$  and  $n = 1$ ; or
  - (iii)  $m = 5$  and  $n = 1$ .
7. (Original) The compound of claim 5 wherein  $m = 4, n = 1$ .
8. (Previously Presented) The compound of claim 1 wherein G is boron.
9. (Original) The compound of claim 8 wherein:
- (i)  $m = 1, n = 3$ ;
  - (ii)  $m = 2, n = 2$ ;
  - (iii)  $m = 3, n = 1$ ;
  - (iv)  $m = 1, n = 2$ ; or
  - (v)  $m = 2, n = 1$ .

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10. (Original) The compound of claim 9 wherein:
- (i)  $m = 1$  and  $n = 3$ ;
  - (ii)  $m = 2$  and  $n = 2$ ; or
  - (iii)  $m = 3$  and  $n = 1$ .
11. (Previously Presented) The compound of claim 1 wherein each R is joined to G through a nitrogen or carbon atom.
12. (Previously Presented) The compound of claim 1 wherein each R is joined to G through a carbon atom.
13. (Previously Presented) The compound of claim 1 wherein G is silicon and at least one R is selected from the group consisting of: aryl, amino, methyl, phenyl, aminophenyl, aminomethylphenyl, alkoxyethylphenyl, a porphyrin, a porphyrin derivative and a biomolecule.
14. (Previously Presented) The compound of claim 1 wherein G is boron and at least one R is selected from the group consisting of: aryl, amino, phenyl, methyl, aminophenyl, aminomethylphenyl, alkoxyethylphenyl, and a biomolecule.
15. (Previously Presented) The compound of claim 1 wherein at least one R is a moiety capable of bonding to a biomolecule.
16. (Previously Presented) The compound of claim 1 wherein at least one R is a biomolecule.

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17. (Previously Presented) The compound of claim 16 wherein the biomolecule is a sugar, a peptide, a nucleic acid or derivative or analog thereof.

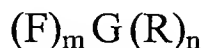
18. (Original) The compound of claim 16 wherein the biomolecule is a hormone, somatostatin, growth hormone, VEGF, EGF, an antibody, a breast cancer antigen specific antibody, a prostate cancer antigen specific antibody, a melanoma antigen specific antibody, a ligand, a RGD-motif ligand recognizing a matrix metalloprotease, an aptamer, an aptamer recognizing a cell surface protein, folic acid, a folic acid derivative and a methotrexate or a derivative or analog thereof.

19. (Previously Presented) A compound according to claim 1 comprising more than one  $^{18}\text{F}$  atom.

20. (Previously Presented) A compound according to claim 1 comprising at least one  $^{19}\text{F}$  atom.

21. (Withdrawn) A composition comprising two or more different compounds each according to claim 1.

22. (Withdrawn) A composition comprising at least one compound according to claim 1 and at least one compound of formula



wherein R, G, M and n are as defined and F is a naturally occurring fluorine isotope.

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23. (Withdrawn) The composition of claim 22 wherein the naturally occurring isotope is  $^{19}\text{F}$ .

24. (Withdrawn) A composition comprising a compound according to claim 1 and a physiologically acceptable carrier or excipient.

25. (Canceled).

26. (Canceled).

27. (Canceled).

28. (Canceled).

29. (Canceled).

30. (Canceled).

31. (Canceled).

32. (Canceled).

33. (Canceled).

34. (Canceled).

35. (Canceled).

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36. (Canceled).

37. (New) A compound of the formula:



wherein

each R is a group comprising at least one carbon, nitrogen, phosphorus or sulfur atom and

G is joined to R through said carbon, nitrogen, phosphorus or sulfur atom;

at least one R is an aryl group;

G is silicon or boron;

m is 2 to 5 and n is 1 to 3 with  $m + n = 3$  to 6 when G is silicon;

m is 1 to 3 and n is 1 to 3 with  $m + n = 3$  to 4 when G is boron;

and wherein the compound further comprises one or more counterions when the above formula is charged; and wherein at least one F is  $^{18}\text{F}$ .

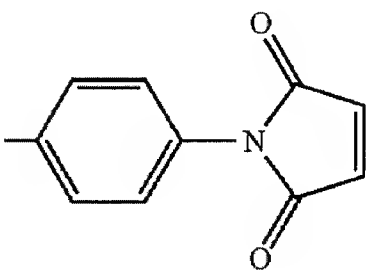
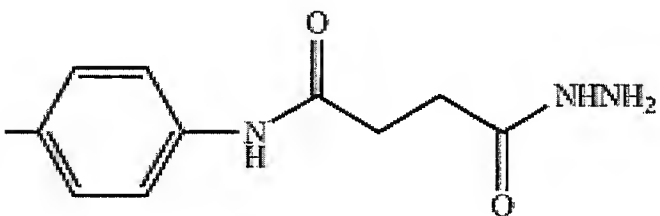
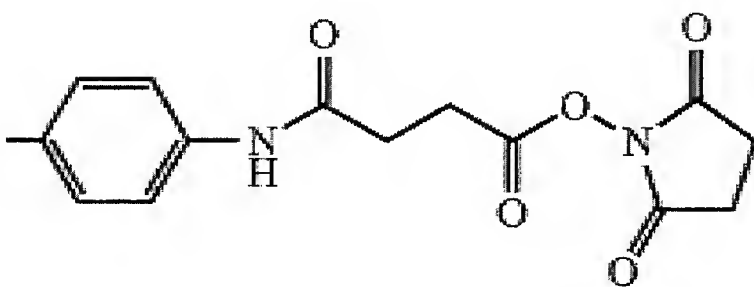
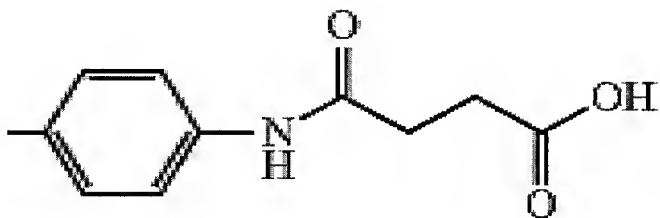
38. (New) The compound of claim 37, wherein the aryl group is selected from the group consisting of:



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